

In the Claims:

Please amend claims 1, 2, 3, 7, 8, 11, 12, 13, 14, 15, and 18 as follows:

1. (currently amended) A method for testing a parallel optical transceiver comprising the steps of:

providing an optical wrap plug and an electrical wrap plug for connecting in series each of a plurality of parallel receiver and transmitter channels of said parallel optical transceiver;

respectively optically connecting each respective channel transmitter to a next respective channel receiver in said series of said plurality of said parallel receiver and transmitter channels using said optical wrap plug;

respectively electrically connecting said channel receiver and said channel transmitter of each said parallel receiver and transmitter channels using said electrical wrap plug;

applying a predefined data pattern to a first channel of said series connected plurality of parallel receiver and transmitter channels;

detecting an output from a last channel of said series connected plurality of parallel receiver and transmitter channels; and

comparing said applied predefined data pattern with said output to identify functional operation of said parallel optical transceiver.

2. (currently amended) A method for testing a parallel optical transceiver as recited in claim 1 wherein the step of ~~connecting in series each of a plurality of channels of said parallel optical transceiver includes the steps of respectively~~

~~electrically connecting a respective channel receiver to a corresponding respective channel transmitter; and respectively optically connecting each respective channel transmitter to a next respective channel receiver~~ applying a predefined data pattern to a first channel of said series connected plurality of parallel receiver and transmitter channels includes the step of applying said predefined data pattern to said channel receiver of said first channel using said optical wrap plug.

3. (currently amended) A method for testing a parallel optical transceiver comprising the steps of:

providing an optical wrap plug and an electrical wrap plug for connecting in series each of a plurality of parallel receiver and transmitter channels of said parallel optical transceiver;

respectively optically connecting each respective channel transmitter to a next respective channel receiver in said series of said plurality of said parallel receiver and transmitter channels using said optical wrap plug;

respectively electrically connecting said channel receiver and said channel transmitter of each said parallel receiver and transmitter channels using said electrical wrap plug;

applying a predefined data pattern to a first channel of said series connected plurality of channels including the steps of generating said predefined data pattern utilizing a serial data generator and applying said predefined data pattern to a first channel receiver of said series connected plurality of channels;

detecting an output from a last channel of said series connected plurality of

channels; and

comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver.

4. (previously presented) A method for testing a parallel optical transceiver as recited in claim 3 wherein the step of detecting an output from a last channel of said series connected plurality of channels includes the steps of detecting an output utilizing a serial data detector connected to a last channel transmitter of said series connected plurality of channels.

5. (previously presented) A method for testing a parallel optical transceiver as recited in claim 3 wherein the step of comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver includes the steps of comparing said applied predefined data pattern with said output and identifying a match to identify correct operation of said parallel optical transceiver.

6. (previously presented) A method for testing a parallel optical transceiver as recited in claim 3 wherein the step of comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver includes the steps of comparing said applied predefined data pattern with said output and identifying failed operation of said parallel optical transceiver responsive to no match of said compared predefined data pattern with said output.

7. (currently amended) A method for testing a parallel optical transceiver as recited in claim 1 includes the steps of connecting a plurality of parallel optical transceivers in series; wherein the step of providing an optical wrap plug and an

electrical wrap plug for connecting in series each of a plurality of parallel receiver and transmitter channels of said parallel optical transceiver is provided for each of said series connected parallel optical transceivers; and wherein the step of detecting an output from said last channel of said series connected plurality of parallel receiver and transmitter channels includes the step of detecting an output from said last channel of said series connected plurality of parallel receiver and transmitter channels from a last one of said series connected parallel optical transceivers.

8. (currently amended) A method for testing a parallel optical transceiver as recited in claim 3 includes the steps of connecting a plurality of parallel optical transceivers in series, and wherein the step of applying a predefined data pattern to a first channel of said series connected plurality of parallel receiver and transmitter channels includes the steps of applying said predefined data pattern to a first channel receiver of said series connected plurality of parallel receiver and transmitter channels of a first one of said series connected parallel optical transceivers.

9. (original) A method for testing a parallel optical transceiver as recited in claim 8 wherein the step of comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver includes the steps of comparing said applied predefined data pattern with said output and identifying a match to identify correct operation of each said series connected parallel optical transceivers.

10. (original) A method for testing a parallel optical transceiver as recited in claim 8 wherein the step of comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver includes the steps of

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comparing said applied predefined data pattern with said output and identifying failed operation of said series connected parallel optical transceivers responsive to no match of said compared predefined data pattern with said output.

11. (currently amended) Apparatus for testing a parallel optical transceiver comprising:

an optical wrap plug and an electrical wrap plug, each including a plurality of connectors for connecting in series each of a plurality of parallel receiver and transmitter channels of said parallel optical transceiver; said optical wrap plug respectively optically connecting each respective channel transmitter to a next respective channel receiver in said series of said plurality of said parallel receiver and transmitter channels using; said electrical wrap plug respectively electrically connecting said channel receiver and said channel transmitter of each said parallel receiver and transmitter channels;

a serial data generator for applying a predefined data pattern to a first channel of said series connected plurality of parallel receiver and transmitter channels using said optical wrap plug; and

a serial data detector for detecting an output from a last channel of said series connected plurality of parallel receiver and transmitter channels using said optical wrap plug; and said serial data detector for comparing said applied predefined data pattern with said output to identify functional operation of said parallel optical transceiver.

12. (currently amended) Apparatus for testing a parallel optical transceiver comprising:

an optical wrap plug and an electrical wrap plug, each including a plurality of connectors for connecting in series each of a plurality of parallel receiver and transmitter channels of said parallel optical transceiver including an optical wrap plug; said optical wrap plug respectively optically connecting each respective channel transmitter to a next respective channel receiver in said series of said plurality of said parallel receiver and transmitter channels using; said electrical wrap plug respectively electrically connecting said channel receiver and said channel transmitter of each said parallel receiver and transmitter channels;

a serial data generator for applying a predefined data pattern to a first channel of said series connected plurality of parallel receiver and transmitter channels; and

a serial data detector for detecting an output from a last channel of said series connected plurality of parallel receiver and transmitter channels and for comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver.

13. (currently amended) Apparatus for testing a parallel optical transceiver as recited in claim 12 wherein ~~said optical wrap plug includes a plurality of optical connectors for respectively optically connecting each respective channel transmitter to a next respective channel receiver~~ said predefined data pattern is applied to said channel receiver of said first parallel receiver and transmitter channel using said optical wrap plug.

14. (currently amended) Apparatus for testing a parallel optical transceiver as recited in claim 12 wherein ~~said plurality of connectors for connecting in series each of~~

~~a plurality of channels of said parallel optical transceiver includes an electrical wrap~~
plug output from a last channel of said series connected plurality of parallel receiver
and transmitter channels is detected using said optical wrap plug.

15. (currently amended) Apparatus for testing a parallel optical transceiver as recited in claim 14 wherein said electrical wrap plug includes a plurality of electrical connectors for respectively electrically connecting a respective channel receiver to a corresponding respective channel transmitter serial data detector for comparing said applied predefined data pattern with said output and for identifying failed operation of said parallel optical transceiver responsive to no match of said compared predefined data pattern with said output.

16. (previously presented) Apparatus for testing a parallel optical transceiver as recited in claim 12 wherein said serial data generator for applying said predefined data pattern to said first channel of said series connected plurality of channels includes an optical connection to said first channel of said series connected plurality of channels.

17. (previously presented) Apparatus for testing a parallel optical transceiver as recited in claim 12 wherein said serial data detector for detecting an output from a last channel of said series connected plurality of channels and for comparing said applied predefined data pattern with said output to identify operation of said parallel optical transceiver includes an optical connection to said last channel of said series connected plurality of channels.

18. (currently amended) A method for testing a plurality of parallel optical transceivers comprising the steps of:

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providing an optical wrap plug and an electrical wrap plug for connecting in series each of a plurality of parallel receiver and transmitter channels of each of said parallel optical transceivers;

respectively optically connecting each respective channel transmitter to a next respective channel receiver in said series of said plurality of said parallel receiver and transmitter channels using said optical wrap plug;

respectively electrically connecting said channel receiver and said channel transmitter of each said parallel receiver and transmitter channels using said electrical wrap plug;

connecting in series each of said parallel optical transceivers;

applying a predefined data pattern to a first channel of a first one of said series connected plurality of parallel optical transceivers including the steps of generating said predefined data pattern utilizing a serial data generator and applying said predefined data pattern to a first channel receiver of said series connected plurality of parallel receiver and transmitter channels;

detecting an output from a last channel of a last one of said series connected plurality of parallel optical transceivers; and

comparing said applied predefined data pattern with said output to identify functional operation of said plurality of parallel optical transceivers.